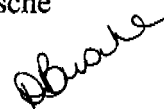


779 Cluster Authorization Basis Management Project**Project Correspondence****Subject: Review and Comment Record****Date: March 24, 1998****To:** John Miller**From:** Donna Busche

Phone: X2601

cc: Julia Hamrick
 Shannon Walker-Lembke
 Dave Satterwhite
 Arlen Schade
 Eric Schweinsberg
 Kelly Trice
 779 Project AR/File
 NSTR Project/File



- References:**
1. cc:Mail, Shannon Walker-Lembke to Donna Busche, *Comments on Review Record*, dated March 16, 1998
 2. cc:Mail, Donna Busche to Shannon Walker-Lembke, *RFFO Feedback on Comment #10*, dated March 13, 1998.
 3. cc:Mail, Shannon Walker-Lembke to Donna Busche, *Re: Summary of RFFO Meeting*, dated March 12, 1998.

The Review Comment Record documenting all comments received by RFFO during Cross Table on the *779 Cluster Decommissioning Safety Analysis* is attached. K-H comments received on a DRAFT version of the comment record (Reference 1) have been incorporated.

The dispositions in the table, document the resolution of comments and changes to the *779 Cluster Decommissioning Safety Analysis*, Rev 0, as agreed to during the Cross Table sessions held March 9th and March 10th. Technical direction provided by RFFO outside of the Cross Table meetings (Reference 3) have also been incorporated.

Comment 10 in the Review Comment Record is still OPEN pending feedback from RFFO (Reference 2).

If you have any questions, please give me a call.

**ADMIN RECORD**

B779-A-00058

Review Comment Record RFFO Cross Table

Document Number				Title		Revision		Page 1	
NSTR-002-98				779 Cluster Decommissioning Safety Analysis					
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned			
H1.1	RFFO	App A	T	The applicability statements in the Control Set currently "turn-off" controls based on the safety analysis (i.e., specific MAR limits). RFFO does not concur with "turning-off" controls base on MAR limits.	Accept. Applicability statements will be revised to eliminate specific reference to the MAR limits. A new definition (OPERATIONALLY CLEAN) will be added to define when the project can turn off ventilation or suppression for a given SCA. Specific LCO 3.1, <i>Ventilation Confinement</i> : <ul style="list-style-type: none">Will modify applicability section to new definition of OPERABLY CLEAN.Will include duct and FP areas in the scope of the LCO. AC 5.2.3.5 requirement will be moved up into the LCO.Will clarify that the requirement for filtration applies when the SCA is exhausting. LCO 3.2, <i>Building Sprinkler System</i> <ul style="list-style-type: none">Will modify applicability section to new definition of OPERABLY CLEAN.Will include requirement that no waste packages may be staged or stored in SCA.Will include a requirement to preclude combustibles.	C			
H1.2	RFFO	App A	T	RFFO is concerned with the use of fixatives in the 779 Closure Project. Specific concerns on the combustibility load increase and the application hazards to the worker (Master Lee Product).	Accept. A control on fixatives will be added to AC 5.6, <i>Fire Protection</i> .	C			
H1.3	RFFO	App A	T	The deluge system provides a defense-in-depth function. Include in the Control Set.	Accept. A new LCO will be added for the deluge system (SC-3). No change will be made to the safety analysis to specifically credit.	C			

Review Comment Record RFFO Cross Table

Document Number		Title		Revision		Page 2	
NSTR-002-98		779 Cluster Decommissioning Safety Analysis		0			
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
HLI 4	RFFO	App A	T	The Fire Department and flow alarms provide a defense-in-depth function. Include in the Control Set.	Accept. Fire Department Response will be added to AC 5.6, <i>Fire Protection</i> . A CONDITION for flow alarms will be added to LCO 3.2, <i>Building Sprinkler System</i> , to correspond to SR 4.2.1.4. No change will be made to the safety analysis.	C	
HLI 5	RFFO	General	Policy	RFFO is concerned with the storage of LLW wooden waste crates outside.	RFFO is developing RFFO's position on the policy issue. 779 will include a requirement for spacing between LLW wooden waste crates in AC 5.6, <i>Fire Protection</i> , and AC 5.3, <i>Inventory Control and Material Management</i>	C	
HLI 6	RFFO	General	T	The control set currently requires limits to be established to maintain the assumptions of the accident analysis. The current information provided is insufficient.	Accept. Section 6.7, <i>Safety Analysis Assumptions</i> , will be modified to include a direct link to the control set.	C	
HLI 7	RFFO	App A	T	Certain industrial hazards pose a risk to workers during the closure process. RFFO is specifically concerned with asbestos abatement, beryllium abatement, and unknown chemicals.	Accept. A new AC will be added to identify the following requirements in Industrial Safety and Health: Health and Safety Plan asbestos hazards beryllium hazards "unknown" chemical hazards lead hazards	C	
HLI 8	RFFO	App A	T	AC 5.9, <i>Maintenance and Surveillance</i> does not contain a requirement for maintenance and surveillance of SC-3 SSCs. Specific SSCs that should be incorporated into the Control Set were listed: • EGEN • instrument air • CAMs/SAAMs • size reduction tents (DESIGN FEATURE).	Requirement will be added require general maintenance on the EGEN, instrument air,	C	

Review Comment Record RFFO Cross Table

Document Number		Title		Revision		Page 3	
NSTR-002-98		779 Cluster Decommissioning Safety Analysis		0			
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
HLI 9	RFFO	App A	T	The facility boundary definition for the ventilation system is confusing to RFFO.	Accept. AC 5.2 will split the two functional areas. There will be one AC on the function for the SCAs and one AC on the function for FP areas and duct. Both ACs will clarify that differential pressure must be negative w.r.t. surrounding areas. Clarification will also be added that temporary or alternate means should rely on hardware (e.g., temporary monitors) as opposed to administrative methods (e.g., paper and smoke tests). Section 2.4.1.4 will be clarified to identify the existing SSC description to be consistent with the description and results provided in the recent ventilation study.	C	
	Cross Table	2	T	Related discussion to HLI 9 came about in Cross Table on the description of the SSC in Section 2.		C	
HLI 10	RFFO	App A	T	RFFO is concerned on the consistency from facility to facility w.r.t. dock controls.	Accept. The applicability statement in LCO will be revised to include the dock. AC 5.3 will identify LLW inventory controls for the dock. Editorial comment on pg 61, section 5.3.3.3 will be corrected.	C	
HLI 11	RFFO	App A	T	RFFO would like to see the "approved alternate means" to be specified in AC 5.5 in advance of the exemption request to 5480.24 being finalized, reviewed, and approved.	Accept. The list of alternate means for the 779 Building will be added. RFFO approval of the 779 BIO will constitute agreement on the acceptability of actions taken to meet the intent of the requirements mandated by DOE Order 5480.24 and associated ANSI standards.	C	
I	Jim Conti	Table 3-1	I	Table 3-1 hazardous materials in building: Please provide actual quantities of chemicals. For expediency sake, if it is an estimate of trace, or several containers, approximated estimates are okay. I know the discussion says for the "no" chemicals, limited or trace quantities are expected.	NSTR-dmb-001 transmits requested information. The revised table will be inserted for the table in Rev 0. The description text will be modified if needed to clarify that the table is only for information purposes w.r.t. determining if additional analysis is required in accordance with SARAH.	C	

Review Comment Record RFFO Cross Table

Document Number		Title		Revision	Page 4	
NSTR-002-98		779 Cluster Decommissioning Safety Analysis		0		
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned
2	Jim Conti	Section 3	T	As I discussed with Bill, the SARAH methodology was used to determine if TPQ or TQ was exceeded, and if it wasn't formal external dispersion calcs were not required. In the table, if no TQ/TPQ existed, RQs were used as a lower threshold. I know we said worker rad estimates were not necessary, and the subsequent discussion talks to the IH program, but the limited information as to amounts is insufficient. Expect a comment that given the beryllium, asbestos, PCBs, and D&D hazards, that IH&S should be an AC.	An AC will be added on Industrial Safety and Hygiene. No additional text will be added to identify or further describe hazards associated with chemicals.	C
3	Jim Conti	Section 3	T	Asbestos (friable) has a RQ of 1lb, table says NA ethanol 1000 lb is listed in SARAH as RQ, not TPQ	Asbestos will be added to Table 3.1. Two ethanol are listed in the SARAH. The ethanol with a TPQ was listed (analysis perspective) since the actual formula for ethanol is not listed in the DOP.	C
4	Jim Conti	General	Q	The Zone I and II ducts that leave the rooms and travel to 782/729: Are they in chases, and is the chase maintained at a negative back to the rooms? Are you going to have to break open the chases to get at the ducts?	See response to HLI 9. No other changes required to document.	C

Review Comment Record RFFO Cross Table

Document Number		Title		Revision		Page 5	
NSTR-002-98		779 Cluster Decommissioning Safety Analysis		0			
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
5	Jim Conti	N/A	Q	Rooms 127/142: The NSTRs state they are at a positive. 127 shows an exhaust path to FP-403. Is there any way to modify ducts/flow to get these areas to a negative when room decon and plenum remediation is done? What is the survey results from 127/142 (are they going to need decon?)	No scan data for FP-403 (i.e., no measurable quantities found). AC 5.2, <i>Ventilation/Filtration Confinement</i> , establishes requirement to determine when an area is required to be negative. Rooms may need to be decontaminated. Governed by AC 5.7, <i>Radiation Protection</i> .	C	
6	Jim Conti	N/A	Q	Plenum 403 doesn't have a holdup listed in the SA. It exhausts 782 and office spaces. I know the RBA (or whatever they call it) has shifted around in the past. What is the holdup of PL-403? What are the NDA results/survey results of the Pu levels in the Zone I and II deluge tanks?	See response to Comment #5.	C	
7	Jim Conti	N/A	Q	Where is the K-H position on use of temporary room/hallway DP gauges?	The KH position is that temporary gauges are adequate and the best choice to ensure the flexibility to focus or change monitoring from/to any area as needed to support activities.	C	
8	Jim Conti	N/A	Q	Table 6-9, sheet 113, if the after mitigation case is after coating with the fixative, and the activity involves cutting up the plenum with the acetylene torch, how are they going to prevent the torch cutting from setting the coating on fire?	AC 5.6, <i>Fire Protection</i> , includes a specific control of use of oxyacetylene. See specific element 5.6.3.2.	C	
9	Jim Conti	N/A	I	Shirley has a set of comments, I'm trying to get them to forward to you.	No response required.	C	

Review Comment Record RFFO Cross Table

Document Number		Title		Revision		Page 6	
NSTR-002-98		779 Cluster Decommissioning Safety Analysis		0			
No.	Reviewer	Section	Type	Comment/Question	Disposition	Status	
			I = Information Q = Question T = Technical			O = Open C = Closed D = Dispositioned	
10	Jim Conti	N/A	Q	It is my understanding that changing airflow rate changes the as tested efficiency of the filters. The std has you test at system operating flow. We haven't done anything in the past because of the assumption that in accidents, the systems will continue to be run at operating flow. Jan Frethold says that filters are run at 20% design, so he does feel they will change significantly. I just don't know how much throttling down will occur during D&D.	AB Support team spoke with Jan Frethold. Does not appear to be an issue. Summary provided on March 10 th to RFFO review team. Tickle request sent to K-H on March 13 th to follow-up.	O	
11	Shirley Olinger	ES	T	Include in the ES the Risk Dominant Accident Scenarios and an overall safety analysis conclusion	Accept. Will add a paragraph to summarize the three Risk Class II dominant scenarios.	C	
12	Shirley Olinger	General	T	a. Consider calling this document a BIO vs NSTR. b. Easy to add a small para. on vulnerabilities and c. I believe we need to discuss immediate worker qualitatively due to significance of DD&D activities on the immediate worker	a. Accept. Document (Sections 1 - 8, and Appendix A) will be issued as a BIO. A paragraph will be added to the introduction section to highlight that this document does not meet the full intent of the requirements and guidance specified in DOE-STD-3011-94. b. Accept. Will add a paragraph to the Executive Summary briefly describing overall vulnerabilities. Vulnerabilities will not be added to each bounding accident scenario. DOE-STD-3011-94 will be used as guidance.	a. C b. C c. C	
					c. Accept. Will add a paragraph to Executive Summary to qualitatively discussing the hazards and associated risks to the immediate worker based on the scope of the 779 Closure Project. Section 4.0, <i>Safety Management</i>		

Review Comment Record RFFO Cross Table

Document Number NSTR-002-98		Title 779 Cluster Decommissioning Safety Analysis			Revision 0		Page 7	
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned		
13	Shirley Olinger	ES	T	Discuss the concept of using the applicability statements to get out of the LCOs as progress with DD&D in reducing the hazards in the Exec. Summary.	<i>Programs</i> establishes the 779 Closure Project's commitment to the <i>Health and Safety Plan</i> . The HASP establishes specific controls for workers as required by 29CFR 1910.120. Accept. Will add a paragraph to the <i>Executive Summary</i> discussing the turning off of the control set requirements, as hazards are reduced (i.e., applicability statements).	C		
14	Shirley Olinger	ES	T	May need to qualitatively address the worker impacts from the significant hazards in 779.	Accept. See response to Comment #12.c. Section 4.0, <i>Safety Management Programs</i> establishes the 779 Closure Project's commitment to the <i>Health and Safety Plan</i> . The HASP establishes specific controls for workers as required by 29CFR 1910.120.	C		
15	Shirley Olinger	App A	T	Don't agree with no TSR for: a. Flow Alarms, b. Plenum Deluge, c. Combustible Controls, d. Emergency Preparedness and e. Configuration Mgmt	a. Flow Alarms will be added to LCO 3.2 The Surveillance Requirement to verify was included in the original transmittal (i.e., SR 4.2.1.4). b. A LCO will be added Plenum Deluge. OPERABILITY as defined in the EOE <i>does not</i> need to be included in the control set. A statement will be added to clarify that system upgrades are not required for the SC-3 system. c. Combustible Controls is included in AC 5.6, <i>Fire Protection</i> . This is a slightly different format from the 371 BIO due to the fact that Fire Protection has recently released Procedure 31.04, <i>Controlling Introduction of Combustibles</i> as part of the Site infrastructure Fire Protection Program. Recommend leaving the requirement to control combustibles in AC	C		

Review Comment Record RFFO Cross Table

Document Number		Title		Revision		Page 8	
NSTR-002-98		779 Cluster Decommissioning Safety Analysis		0			
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
					5.6 for ease of the user in grouping and managing their requirements. d. Accept. Will add an AC on Emergency Response.		
					e. Accept. Will add an AC on Configuration Management. The key program elements will be limited to those aspects of the program that the 779 Closure Project will be using. Much of the Configuration Management requirements address "paper." Program elements will be consistent with procedure requirements for decommissioning.	C	
16	Shirley Olinger	I	T	Discuss in Section 1.3 the USQs that were negative due to comp measures, what these are and how NSTR addresses them. How are the controls identified in the USQ discussion implemented in NSTR. Don't understand the last para. in section 1.3.	NSTR-dmb-003 transmitted USQDs that were negative with compensatory measures. The last paragraph summarizes those USQDs that were negative with compensatory measures. During the review of the database and the USQD files, the AB support team determined that those negative USQDs with compensatory measures were limited to a very small subset of activities. Those USQDs pertinent to the scope of the 779 Cluster Decommissioning Safety Analysis are summarized in Section 1.3. The last sentence of each USQD discussion typically describes HOW the 779 Cluster Safety Analysis disposition (i.e., addressed).	C	
17	Shirley Olinger	General	Policy	Concerned with allowing LLW outside the facility; policy decision.	No additional text be added. Management meeting held March 11, 1998. Technical direction provided to a requirement that LLW be stored in metal storage boxes (unlimited) or in clumps of 5 collocated crates with an adequate spacing distance.	C	

Review Comment Record RFFO Cross Table

Document Number		Title	Revision		Page 9	
NSTR-002-98		779 Cluster Decommissioning Safety Analysis	0			
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned
18	Shirley Olinger	General	T	It is very unclear how we will be assured negative pressure throughout the DD&D activities	AC 5.2, <i>Ventilation/Confinement Control</i> , Key Program Elements, provides the requirements to identify areas requiring DP, the means to measure the DP, and a procedure to rebalance and manage upsets. No change required to document.	C
19	Shirley Olinger	General	T	Where is the control that addresses the criticality lessons learned from Hanford; to NDA each package prior to placing it into waste container.	<p>The 779 Cluster Decommissioning Control Set is based on the safety analysis and selection criteria of DOE Order 5480.22:</p> <ul style="list-style-type: none"> • LCO 3.3, <i>Criticality Detection</i> • AC 5.4, <i>Criticality Safety</i> • AC 5.5, <i>Criticality Accident Alarm System and Notification</i> <p>These controls provide control of hazards associated with the handling of fissionable material in this facility.</p> <p>The AB Support team reviewed the 1987 event at a criticality mass laboratory to determine if there was a similar concern at the 779 Cluster. (Reference: Final Report, <i>Recovery from Exceeding the Pu Limits in Waste Burial Containers at CML, D.L. Haggard, et.al., dated May 1987.</i>)</p> <p>The report contained seven significant lessons learned.</p> <ul style="list-style-type: none"> • The majority of the concerns and corrective actions addressed the <i>waste handling and packing process</i>. AC 5.3, <i>Inventory Control and Material Management</i> provides the requirements to preclude the occurrence of a similar hazard at the 779 Cluster (see key program elements, Section 5.3.2. 	C

Review Comment Record RFFO Cross Table

Document Number		Title		Revision		Page 10	
NSTR-002-98		779 Cluster Decommissioning Safety Analysis		0			
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
20	Shirley Olinger	3, 4, and 5 App A	T	a. Need a lot more work on the IH hazards (asbestos/beryllium) in Chapter 3.3, 4.5, 5, 6 and TSR AC. b. Due to asbestos, beryllium and PCB remediation work there should be an AC relating to the IH required controls, similar to the Radcon AC.	<ul style="list-style-type: none">One finding addressed the strippable coating applied to fix contamination.) The current site approved fixative (i.e., Bartlett TLC) has a criticality evaluation governing it's use and application. The Master Lee product analyzed in the 779 Cluster Decommissioning Safety Analysis, has a criticality evaluation (DRAFT) which is currently in review.The remainder of the lessons learned addressed the techniques used to determine the loading in a waste container. The 779 Cluster will use the site approved sampling and packaging requirements to ensure the waste generated meet appropriate storage and disposal criteria.	C	
21	Shirley Olinger	3 and 5	Q	It is not clear whether perchloric acid was used in hoods or gloveboxes and if so why the issue of perchloric acid in ducts is not of concern.	<p>a. The level of detail presented in chapters 3, 4, and 5 is consistent with the SARAH and applicable DOE Standards (i.e., 1027, 5502, 3011, and 3009). No changes required to document.</p> <p>b. See response to HLI 7.</p> <p>The facility has been walking down the facility to test for perchlorates in response to the Site issue of perchloric acid in the ventilation system. To date no measurable quantities have been found. See response to HLI 7. No additional changes required to document.</p>	C	

Review Comment Record RFFO Cross Table

Document Number		Title		Revision		Page 11	
NSTR-002-98		779 Cluster Decommissioning Safety Analysis		0			
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
22	Shirley Olinger	3	T Q	Add the quantities on hand and location for each of the materials identified in Table 3-1. Do any of these chemicals have EPST values?	See response to Comment #1.	C	
23	Shirley Olinger	3	T	Clarify the term "solutions" implies actinide solutions vs fluids.	Accept. Clarification will be added to Section 3.	C	
24	Shirley Olinger	3	T	Concerned about the "combustible and toxic" fixative being used. How does it react with other chemicals that may be in the GB, e.g., perchloric acid.	See response to HLI 7 and Comment #21 for perchloric acid concern. GBs have been cleaned-out of chemicals and excess equipment. Combustibility of Master Lee (analyzed fixative) will be provided at Cross Table. Current analysis is underway to evaluate the combustibility of the Bartlett TLC fixative. Chemical compatibility of fixative is controlled under AC 5.3, <i>Inventory Control and Material Management</i> (i.e., Site packaging requirements, segregation by IDC).	C	
25	Shirley Olinger	3	T	Why wouldn't we restrict where size reduce vs storing combustibles and waste containers. Also segregate where combustibles vs waste containers can be stored	AC 5.6, <i>Fire Protection</i> , requires that limits be established, implemented and maintained for combustible material storage and staging throughout the facility. Separate limits are required for size reduction and waste storage locations.	C	

Review Comment Record RFFO Cross Table

1070 CROSS TABLE

Document Number		Title		Revision		Page 12	
NSTR-002-98		779 Cluster Decommissioning Safety Analysis		0			
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
26	Shirley Olinger	App A	T	Shouldn't we require the steps to be performed in numbered sequence in section 3.5.3? For example, step 12 must happen before step 13.	The purpose of Section 3.5.3 is to ensure that the activities are described along with their associated hazards. No additional discussion needs to be added. No control will mandate the sequence as a control. Management meeting provided technical direction to include a control on removal of defense-in-depth equipment.	C	
27	Shirley Olinger	4	T	What should the special controls be to preclude the Oakridge fatality during welding when we oxyacetylene cut-up the plenums, etc.	AC 5.6, <i>Fire Protection</i> , and AC 5.7, <i>Work Control</i> , provide adequate controls on hot work (i.e., permit required) and work planning (i.e., hazards associated with the task are identified and integrated into work instructions via Activity Hazards Analysis.)	C	
28	Shirley Olinger	3	T	The discussion at the end of section 3.5.3 is rather weak considering this is where the bulk of the hazards will occur. The level of detail should be more than the other sections	No changes required. The safety analysis adequately identifies and evaluates hazards associated with Activity 5.	C	
29	Shirley Olinger	General	T	Transportation program for onsite greater than 200gms is dictated by the NSTR for onsite transportation and the MAL AA that identifies the controls.	Accept. Will reference Site SAR and NSTR on transportation.	C	
30	Shirley Olinger	6	T	Should describe all the Risk class I and II accidents in section 6	In addition to the linking tables and analysis summary tables, Section 6 will provide a description of each bounding accident scenario.	C	
31	Shirley Olinger	6	T	Include the Radiological and Chemical Accident consequence Levels Tables	Radiological table will be added. The table for consequence levels of chemicals will not be added. Chemicals required no further analysis in accordance with SARAH.	C	
32	Shirley Olinger	6	T	Need a discussion and reference to the chemical consequence calcs. (see Section 5.2.1.2, 5.2.3, 5.2.3, and 5.3.8 of B371/374 BIO). Should be crediting Emergency Response for the workers	No chemical (other hazardous material) analysis was performed in accordance with the SARAH methodology and applicable DOE Standards.	C	

Review Comment Record RFFO Cross Table

Document Number NSTR-002-98		Title 779 Cluster Decommissioning Safety Analysis		Revision 0		Page 13	
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
33	Shirley Olinger	6	T	Make it clear that CID info based on 50% vs 95% and how you are using this info.	Accept. Numbers will be taken out.	C	
34	Shirley Olinger	6	T	Discuss each of the risk dominant scenarios that are Risk Class I or II to MOI/CLW and discuss the controls that prevent/mitigate the risk	See response to Comment #30.	C	
35	Shirley Olinger	6	T	The LLW wooden waste crate fire at 5.7 rem to MOI should be noted as RC I vs II?	Typo will be corrected. Text will be added to clarify between the 5 crate fire and the 100 crate fire.	C	
36	Shirley Olinger	6	T	Need to look at fires that activate sprinklers but also rely on fire dept response. See B371 BIO, they list many	Accept. Fire Department response will be added to the 779 Cluster Decommissioning Control Set.	C	
37	Dr. Torma-Krajewski	General	T	If this document is to be the basis for controlling all work in the Building 779 Cluster, it is inadequate for addressing hazards classified in the document as "standard industrial hazards." There is no safety management program for either industrial hygiene or occupational safety. Although the Safety Analysis refers to the Health and Safety Practices Manual, this manual is not current with the K-H contract and organizational structure. The SAR must be upgraded to include occupational safety and industrial hygiene as safety management programs	This document establishes the safety basis for the 779 Cluster Closure Process. It is ONE of the regulatory documents required to control work and hazards in the facility. The AA will need to specify the other key "licensing" documents driven by other regulations (i.e., DOP, HASP). Section 4.0, <i>Safety Management Programs</i> , Section 4.5, <i>Hazardous Material Protection</i> , identifies the program commitments to industrial hygiene and safety. Section 4.0, <i>Safety Management Programs</i> , Section 4.8.3, <i>Industrial Safety</i> , contains provisions to implement federal regulations addressing standard industrial hazards.	C	
38	Dr. Torma-Krajewski	3	T	Section 3.3 does not provide a comprehensive list of potential problems associated with the tasks for this activity. For example, heat stress is a major problem associated with asbestos abatement, yet it	Management meeting provided technical direction to add ONLY the hazards identify by the reviewer. A comprehensive listing is not required.	C	

Review Comment Record RFFO Cross Table

Document Number		Title		Revision		Page 14	
NSTR-002-98		779 Cluster Decommissioning Safety Analysis		0			
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
39	Dr. Torma-Krajewski	3	T	<p>is not listed as a result of the activity. Also, since wet methods are used during asbestos abatement, electrical shock is always a potential hazard with this task. Yet it also is not listed as a potential result of the activity</p> <p>Table 3-1 in Section 3.3 provides very little information useful for determining potential employee exposures. More useful information would include the actual amount of material; storage configuration; potential to be found in ventilation systems, piping and drains; occupational exposure limits (threshold limit values or permissible exposure limits); and the potential for exceeding the occupational exposure limit</p> <p>Section 3.5.3 does not include steps for asbestos, lead, chromium and beryllium abatement and decontamination activities.</p>	See response to Comment #38.	C	
40	Dr. Torma-Krajewski	3	T	<p>Many sections of the SAR are weak in terms of identifying occupational safety and industrial hygiene hazards. For example:</p>	Paragraph will be added to Section 3.1 to identify that asbestos and beryllium may be encountered in each activity.	C	
41	Dr. Torma-Krajewski	General	T		Occupation Safety and Industrial Hygiene hazards are routinely screened from further analysis in nuclear safety analysis reports since their risks are bounded by other hazards. Worker safety from these hazards is managed through the Safety Management Program on Hazardous Material Protection, the Health and Safety Plan, etc.	C	
					Section 5.2, Hazard Checklist, highlights that standard industrial hazards were only considered to the degree that they were a contributor or an initiator in an accident scenario for the uncontrolled release of radioactive or other hazardous material.		

Review Comment Record RFFO Cross Table

Document Number NSTR-002-98		Title 779 Cluster Decommissioning Safety Analysis		Revision 0	Page 15	
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned
		3	T	<ul style="list-style-type: none"> Sections 3.5.3.10, 11 and 12 do not address the potential for hazardous materials, other than radioactive materials, being found in the ductwork, such as beryllium and perchloric acid. 	See response to Comment #40.	C
		3	T	<ul style="list-style-type: none"> Section 3.5.3.14.3 does not address the potential for employee exposures to the fixative coating when it is sprayed. Methylene bisphenyl isocyanate, or MDI, has an OSHA PEL of .02 ppm and is a respiratory sensitizer. 	See response to Comment #38.	C
		3	T	<ul style="list-style-type: none"> Sections 3.5.3.14.6, 7, 8, 9 and 11 do not address the potential for exposure to vibration, excessive force, repetitive motions and awkward postures during use of scarifiers, paving breakers, chipping hammers, cutting tools and concrete cutting saws. Also, high noise and not moderate noise would be expected with concrete cutting saws. 	See response to Comment #38.	C
		3	T	<ul style="list-style-type: none"> Section 3.5.3.14.10 does not address the potential for the generation of metal fumes during the oxyacetylene cutting process. 	See response to Comment #38.	C
42	Dr. Torma-Krajewski	4	T	Section 4.13.1 does not include key responsibilities for the president or the manager that address occupational safety and industrial hygiene.	Section 4.31.1 does not distinguish between nuclear and non-nuclear safety when identifying responsibilities to responsible line management. "Safe operation" includes nuclear and other hazardous material. "In accordance with regulatory requirements" includes OSHA, EPA, Dept of Labor, etc....	C

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No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
43	Dr. Torma-Krajewski	5	T	Table 5.1 does not include several "standard industrial hazards" associated with the activities and tasks described in this document. Examples include heat stress, vibration, chromium contamination from kathene spills, and ergonomic risk factors (repetitive motion, high force, awkward posture, etc.)	See response to Comment #38.	C	
44	Jim Conti	App A	T	The concept of using MAR numbers as a threshold for applicability of LOC and Admin Controls is not accepted by RFFO. The logic used is that once below these thresholds, LCO controls are no longer required. However, just demonstrating 4.99, or .099 Rem does not demonstrate that these controls are still not appropriate to remain in place under important defense in depth, given the uncertainty of the sequence, D&D activities, and how these controls will be implemented. Separate proposals exist as to applicability of filtration and DP.	See response to HLI 1.	C	
45	Jim Conti	App A	T	The applicability statement for fire suppression should be revised to require removal of combustibles below a level approved by FP engineering - also for FP areas, the issue of FP holdup should be addressed by removal of plenum components, not gram amounts.	See response to HLI 1.	C	
46	Jim Conti	App A	T	Plenum deluge - the lack of plenum deluge as a credited system for appears to be driven by a combination of uncertainty in operability issues, ventilation controls to dilute room fire temperatures. Because the NSTR uses the methodology that only controls that can be absolutely and directly credited in the analysis make it to TSR level controls, there is no place for designation of important defense in	See response to HLI 3.	C	

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No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned
47	Jim Conti	2	T	<p>depth controls as LCOs or ACs. The deluge system has been identified by the Site team as an important tool in mitigation of fires, such that a guidance report was issued for fire fighting strategies.</p> <p>Page 11: support system designation lacks any specificity and misses some logical systems. Since defense in depth and support system are detailed in the safety analysis, it is hard to say that the analysis drives the programs. This section should list the support systems and provide the agreed upon function.</p> <p>Missing from the list: effluent monitoring, plenum deluge, emergency lighting, instrument air, breathing air, emergency power (which should be maintained until the applicable ventilation system is secured), local and office fire suppression/alarms, internal fire barriers.</p> <p>The maintenance AC should say something about maintaining these systems.</p> <p>Size reduction Tents: Since these happen to be directly credited in the accident analysis, why are they not SC-1/2?</p>	See response to HLI 3 and HLI 8.	C
48	Jim Conti	2	T	<p>Page 21 Fig 2-6: The provided ventilation study has note on the P1403 line from 779 cold offices "unable to verify" Is this still an issue?</p>	The note in the ventilation study was in indication that the initial walk down was unable to visually locate and verify the line. FP-403 has NO HOLDUP. Not a safety issue.	C
49	Jim Conti	General	T	B779-B needs to have a PDIT installed as the base DP indicator for the area.	See response to HLI 9.	C
50	Jim Conti	General	Q	How are 729 and 782 DP going to be verified?	AC 5.2, Section 5.2.2, Key Program Elements, specifies the requirement to determine when monitoring is required, provide the means to monitor, and provides the process to manage upsets in airflow which may occur.	C

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No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
51	Jim Conti	2	T	Page 25: The safety function of the sprinkler system is to work with fire barriers to extinguish fires. I thought the design of sprinkler coverage was such that they suppress fire growth to allow fire dept response to extinguish, hence the title fire suppression.	Accept. Will clarify safety function of sprinkler system.	C	
52	Jim Conti	3	T	Table 3-2 page 41 states that the containers have an analyzed WG Pu equivalent limits. Is this really true that TRU containers will control levels to equivalent WG Pu limits? LLW waste containers are expressed in activity/weight. Does Americium have significantly different curie DCF such that this causes problems?	The accident analyses used WG Pu equivalent to account for the in-growth of Am. TRU containers will have to control to equivalent WG Pu limits. No change required to document.	C	
53	Jim Conti	3	T	Page 51 step 12: These last sentence of the first paragraph states that plenums supporting a specific area will not be removed until the gb, duct, and contamination are below safety analysis and RP thresholds. What are the Rp thresholds?	The is no hard and fast limit (i.e., below regulatory concern). Radiation Protection will be working with the project to calculate the threshold as appropriate at this stage in the decommissioning process.	C	
54	Jim Conti	4	Q	Page 73 Where does the CCA fit in under the WATM in the line structure?	CCAs report directly to the WAT manager. Will be added to figure.	C	
55	Jim Conti	4	Q	Page 74, CM Where is the requirement that facility procedures will be maintained current with facility configuration changes?	See response to Comment #15.	C	
56	Jim Conti	4	Q	ISM: Where does the facility HASP fit in and where is it mentioned?	The ISM section reflects the K-H manual. The HASP is just ONE of the many "licensing documents" for this facility and is identified in SMP on <i>Activity Control</i> . This is the primary INTEGRATING SMP for activities conducted in the 779 Cluster.	C	
57	Jim Conti	5	Q	Page 5.1 What is the holdup of PL-403 and of the process drain tanks for plenum deluge for Zone I/II drains? What are the plans for remediation of the 8000 gal pit and T-5 in room 101, and raschig ring	There is NO HOLD-UP in FP-403. See scan data. The 8000 gallon pit and tank T-5 in Room 101 will be decontaminated to as low as achievable and left	C	

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No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned
				tank T-401 in 782?	in place.	
58	Jim Conti	5	T	Table 5-1 Where is the description for drum liners and plastic that will be staged prior to use?	Tank T-401 has no hold-up. Tank will be cut up and removed. Table 5-1 is based on a facility walk-down and is in a sense a snap shot in time. At the time of the walk-down there were NO drum liners in the facility. The project intends to stage drum liners outside the facility (i.e., away from MAR). Liners will be in drums while in facility. No change required to document. AC will provide adequate controls.	C
59	Jim Conti	5	T	Table 5-1 natural gas is confusing- line is shutoff but also blanked off, but there is a residue, unknown if purged. This is not carried forward anywhere in the document. I thought all natural gas lines are blanked off at the building.	Will verify and clarify text as needed.	C
60	Jim Conti	5	T	Natural phenomena discussion: The CID numbers are 50% dispersion, argument should be that risk is presented there and due to low relative/MAR risk no further discussion is needed. Should the existing seismic capability be addressed as a passive feature not to be degraded until the building is dropped?	See response to Comment #33.	C
61	Jim Conti	6	Q	Page 95, the argument that plenum rooms will be at ambient during cutup, during Zone I cutoff won't Zone II plenums be running?	Zone II will be running when Zone I is cutoff. This will make the rooms negative, but not necessarily the plenums. Paragraph will be added to lead-in section.	C
62	Jim Conti	6	T	Page 97, argument is made several times for fires busting CLW dose that under EP, the CLW is not going to remain under the downwind plume. This is as strong an argument for a control that can almost be credited, and would become a direct, not defense in depth control. Especially with the uncertainty	See response to Comment #15.	C

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No.	Reviewer	Section	Type (I = Information Q = Question T = Technical)	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
63	Jim Conti	App A	T	<p>associated with building activities, a strong EP is needed.</p> <p>The fire protection and ventilation system AC both contain general statements that controls will be implemented that maintain safety analysis assumptions. This is not specific enough. The specific credited assumptions must be listed. The ones I can figure out are component/combustible spacing such that only one package will go up, ventilation dilution such that deluge is not required, and combustible control such that internal/external fire barrier deficiencies and sprinkler deficiencies are compensated. It is not appropriate to list a control that says to go seek out and maintain SA assumptions, otherwise I'd write the LCOs that way too.</p>	Section 6.7 itemizes all accident analysis assumptions. Linkage will be made in Section 6.7 to the appropriate control.	C	
64	Jim Conti	App A	T	<p>As I understand the integrated controls, we are supposed to maintain a ventilation dilution control, fire suppression, and combustible controls such that any one fire will not breach the HEPA filters. Deluge is thus not required, and not credited. It is unclear to what extent that it will be feasible to integrate fire accident models, spacing/combustible controls/ and ventilation airflow balances such that this assumption can be maintained. Either all of these analyses have to be presented prior to approval, or the controls have to be revised.</p>	See response to Comment #15 and HLI 3. Originally proposed control of ventilation flow will be deleted.	C	
65	Jim Conti	App A	T	<p>TSRs: definition of ACs: the last set of definitions contain reference to record keeping, assessment, and reporting, which are no longer in RFETS TSRs.</p>	The definition is taken directly from DOE Order 5480.22. No change required to document.	C	
66	Jim Conti	App A	T	<p>The B779 TSRs have appeared to shifted AC compliance below VIOLATIONS to section 1.4 safety basis compliance - DOE needs to decide</p>	Management meeting provided technical direction to mandate a multi-level of managing deficiencies for the 779 Closure Project.	C	

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67	Jim Conti	App A	T	whether to accept this. LCO 3.0.6 refers to individual program deficiencies to be handled in accordance with the control set, I think this fits with lesser deficiencies that used to be in the 5.0 section	Accept. LCO 3.0.6 will be modified to eliminate confusion.	C
68	Jim Conti	App A	T	LCO 3.1: I think the wording needs to be revised. 782/729 are not SCAs, but will be exhausted by the systems. At some point it will just be the ducts and the plenums, and the SCAs will be no longer exhausted.	See response to HLI 9..	C
69	Jim Conti	App A	T	LCO 3.1.A the i.e. statement doesn't include activities outside SCAs.	See response to HLI 9.	C
70	Jim Conti	App A	T	LCO 3.1B does not take into account that it may be chosen to maintain rooms positive and control with rad tents. It is conservative.	Second CONDITION will be deleted. AC 5.3 will provide a control to prohibit storage of waste packages in plenum areas.	C
71	Jim Conti	App A	T	Applicability statement SR 4.1.2 doesn't account for if duct plenum work is on going.	SR 5.2.4.2 will be moved from the AC section to LCO 3.1. No CONDITION needs to be developed. See response to Comment #70. SR will be deleted.	C
72	Jim Conti	App A	T	I am assuming with the requirement to do SR 4.2.1.4 that this includes the alarm function, and the related condition is the associated system NOT OPERABLE.	See response to Comment #15.	C
73	Jim Conti	App A	T	DOE criticality needs to accept the new construct provided in the B779 TSRs for criticality alarm. I guess the new philosophy is that with the very low MAR if the criticality system is inoperable, it is acceptable to terminate handling instead of building evacuation.	Management meeting accepted the proposal to split the control.	C
74	Jim Conti	App A	T	Also the new split takes the LSDW notification/beacons CONDITION and SR and moves them to an admin control. The tone signal	See response to Comment #73. .	C

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No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
				generator test is part of the operability of the criticality alarm panel and should stay in the LCO. The loss of AC power to the criticality panel should include LSDW. The requirement to have no trouble alarm includes alarms that are no directly a part of operability of the criticality panel, but is consistent with 371 and conservative	A CONDITION will be added for loss of power. The corresponding REQUIRED ACTION will be to SUSPEND ACTIVITIES in AFFECTED AREAS.		
75	Jim Conti	App A	T	Criticality SMEs need to accept/reject control of LSDW annunciation and the specifically of alternate methods without specifying actual acceptable methods	See response to Comment #73.	C	
76	Jim Conti	App A	Q	What is the difference between SR 5.5.4. 2 and 4?	SR 5.5.4.2 verifies beacons activate when in alarm mode. SR 5.5.4.4 verify operability of at least one beacon per circuit	C	
77	Jim Conti	App A	T	5.1.1 AC organization and management: one ventilation building engineer should be available during ventilation system adjustments created by removal of ventilation components from service, to provide guidance and assistance.	A new position will not be defined in the minimum staffing AC.	C	
78	Jim Conti	App A	T	5.2.2. under procedures: procedures will be maintained up to date and current with current configuration.	See response to Comment #15.	C	
79	Jim Conti	App A	T	5.2.3 revise to include ducts removed and first stage Zone II plenums removed remediated.	See response to HLI 1.	C	
80	Jim Conti	General	Q	FP-403 holdup?	There is NO HOLD-UP in FP-403.	C	
81	Jim Conti	App A	T	SR 5.2.4 There should be a SR to reverify balance after removal of components	Accept. Surveillance requirement will be added to AC 5.2 to require verification.	C	
82	Jim Conti	App A	Q	FP-403 exhausts the office areas and room 127. How is the filtration requirement going to be controlled for 127 if the room is chosen to go negative for confinement?	See response to HLI 9.	C	

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No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
83	Jim Conti	App A	T	Page A-61: The 2 day exception for fire suppression was verbally told to me as the dock didn't have sprinklers. On tour I was told it all has sprinklers. If this exception is for the dock, then make it for the dock. If there is going to be a 2-day exception it conflicts with the LCO which requires specific actions in 4 hours.	See response to HLI 10.	C	
84	Jim Conti	App A	T	The control for 5 wooden crates: what is a location: a room? Is this a reasonable minimum. How is five crates burning going to dilute so as to not knock out filtration?	The word "location" will be changed to "room," (pg. 61, 5.3.3.4). Dilution control will be deleted.	C	
85	Jim Conti	App A	T	100 LLW crates outside: see SJO comments.	See response to HLI 5 and Comment #17.	C	
86	Jim Conti	App A	T	the solution in crate requirement Should it be more in line with site transportation requirements, since it is going outside?	No change to document. AC 5.3 provides adequate controls.	C	
87	Jim Conti	App A	T	Criticality AC: if we approve this new philosophy, I recommend the alternate means be specified, because the ANSI std only specifies visual, and DOE needs to buy off on the new alternate means	See response to HLI 11 and Comment #73.	C	
88	Jim Conti	App A	T Q	SR 5.5.3 conflicts with alt means	See response to HLI 11 and Comment #73.	C	
89	Jim Conti	App A	T	Given the high level of construction/destruction work related to rad takedown, and hazards (the list provided says they are still checking perc) and the fact that serious injury could occur, IH&S should be elevated to AC.	SR 5.5.3 will change the work "verify" to "testing." See response to Comment #15,	C	
90	Jim Conti	App A	Q	where is training fit into this process? Under IWCP which says trained individuals for work?	AC 5.8, <i>Work Control</i> , requires work to be performed by <i>trained</i> personnel.	C	
91	Naomi Moon	6	Q	p. 116 How does MAR limit help mitigate criticality?	MAR limits established by other program requirements (i.e., packing for shipment to WIPP)	C	

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No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
92	Naomi Moon	App A	Q	Why is Criticality Detector System an LCO and the annunciation for the Criticality Alarm System an Administrative Control?	although not driven from Crit requirements do provide a preventive function to ensure that Criticality Safety limits are not challenged. See response to Comment #73.	C	
93	Naomi Moon	App A	Q	3.3 Why is LCO on the criticality accident alarm panel, not the Criticality Alarm System?	There are KNOWN deficiencies in the audibility of the LS/DW system in two rooms. The project will be creating HIGH NOISE areas during the decommissioning process. A separate AC was developed: <ul style="list-style-type: none"> to ensure that the FUNCTION to notify workers was adequately provided given the current deficiencies, and to ensure the FUNCTION was provided throughout decommissioning activities. 	C	
94	Naomi Moon	App A	T	3.3 Condition A. Condition should refer to operability of CAAS, not just the panel	See response to Comment #73.	C	
95	Naomi Moon	App A	T	3.3 Condition A. Required Action A.1 should be for entire facility, not just AFFECTED AREAS.	See response to Comment #73 and Comment #92..	C	
96	Naomi Moon	App A	T	3.3 Condition A. It is not clear why it would take as long as 2 hours to SUSPEND ACTIVITIES	The CONDITION will not be modified. The BASES section will clarify and link to the 5.B.02 analysis. Two hours is a reasonable time to provide safety suspension of activities. No change to document.	C	
97	Naomi Moon	App A	T	3.3 Condition C. Required Action C.1 should be for entire facility, not just AFFECTED AREAS.	Comment withdrawn.	C	
98	Naomi Moon	App A	T	3.3 Condition C. It is not clear why it would take as long as 2 hours to SUSPEND ACTIVITIES	See response to Comment #96.	C	

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99	Naomi Moon	App A	T	3.3 Condition D It is not clear why it would take as long as 2 hours to SUSPEND ACTIVITIES.	See response to Comment #96.	C	
100	Naomi Moon	App A	T	3.3 Condition E Required Action E.1 should be for entire facility, not just AFFECTED AREAS.	See response to Comment #95.	C	
101	Naomi Moon	App A	T	3.3 Condition E It is not clear why it would take as long as 2 hours to SUSPEND ACTIVITIES	See response to Comment #96.	C	
102	Naomi Moon	App A	T	p. A-45. The NCSM does NOT define aspects of the criticality accident alarm systems which are required to demonstrate system operability. These are usually done in the SERs	Confusing text will be deleted (3 rd paragraph, second to the last sentence).	C	
103	Naomi Moon	App A	T	p. A-45. The criticality detection system also consists of the electrical circuitry connecting the detectors to the alarm panel and the supporting electrical power source.	See response to Comment #93.	C	
104	Naomi Moon	App A	T	p. A-49, Actions C.1, D.1, and E.1. The bases states that "The safety analysis assumes that a criticality is possible during those portions of the closure process where fissionable material is being handled". It is not clear how this statement supports the extended completion time to suspend activities.	BASES will be rewritten to eliminate reference to "suspension of fissionable material handling."	C	
105	Naomi Moon	App A	T	p. A-51, SR 4.3.1. This Surveillance does not actually verify operability of the entire accident alarm system. For example, the SR doesn't require activation of the beacons (although the procedure currently does).	BASES will be clarified.	C	
106	Naomi Moon	App A	T	p. A-64, 5.5.1. The SSCs identified in this section are inconsistent with those identified in Section 5.9.2 (for example, LS/DW).	Accept. AC 5.5.1 and 5.9.2 will be revised as need to be consistent. Changes will be made throughout the document as needed.	C	
107	Naomi Moon	App A	T	p. A-64, 5.5.2. This section should address the exterior beacons explicitly	Accept. Exterior notification will be added as a 4 th element.	C	

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No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
108	Naomi Moon	App A	T	p. A-64, 5.5.2. What are the alternate means of notification? What are the previously written and approved procedures? What are the alternate means of controlling access? Where will these be defined?	See response to HLI 11. Procedures will be developed as part of implementation.	C	
109	Naomi Moon	App A	T	p. A-64, 5.5.4. What happened to Section 5.5.3?	Accept. AC 5.5 will be renumbered to correct the typo.	C	
110	Naomi Moon	App A	T	p. A-64, 5.5.4. The first paragraph should note that these surveillance requirements also apply to LS/DW speaker audibility.	Accept. Will add "and LS/DW audibility."	C	
111	Steve Smith	3	T	Pg. 47. Clarify last sentence in 4 th paragraph. Should read Zone I and Zone II.	Accept.	C	
112	Tom Denny	2	T	Pg. 16. Clarify what an RCA is.	Accept. Terminology will be modified to be consistent with the remainder of Section 2.	C	
113	Tom Denny	3	T	Pg. 37. What is #2. Clarify between rad and non-rad.	Accept. Will add a parenthetical statement to highlight proximity.	C	
114	Tom Denny	3	T	Pg. 55. Section 3.5.3.14.7. Description of "low" waste generation volume unclear --- "up to 6 inches."	Intent of this section is to identify ONLY new waste that will be generated. The entire facility is waste. This activity does not generate a significant amount of "new waste." No change will be made to the document.	C	
115	Tom Denny	App A	T	Pg. A-53. There is no standard definition for DISCOVERY USQ.	Accept. Appendix A will be modified. DISCOVERY USQ will go away as a standard definition (i.e., will be changed to lower case).	C	
116	Tom Denny	3	T	Pg. 46. Clarify "or overload."	Accept. Confusing text will be deleted.	C	
117	Mary Regan	2	T	Pg. 13. Clarify the sentence on floor sweepings.	GB floor sweepings contain less than 300 grams. The 779 safety analysis bounds the hazard. Currently waiting on the results of the criticality evaluation prior to removal from the facility.	C	
118	Shirley Olinger	6	T	Need a discussion and reference to the chemical consequence calcs. (see Section 5.2.1.2, 5.2.3, 5.2.3, and 5.3.8 of B371/374 BIO). Should be crediting Emergency Response for workers.	No chemical consequence calculations was required or provided for the 779 Closure Project. No discussion or reference will be provided.	C	

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119	Shirley Olinger	6	T	Plenum Deluge should be in the TSRs so need medium fires. Need alarm capability and def in depth for filter spray.	See response to Comment #15 for EP controls. Plenum deluge is credited and analyzed in the 779 safety analysis as a defense-in-depth SSC. No new fire scenarios will be developed. Will elevate the plenum deluge (SC-3 system) to TSR control set and develop a LCO. Operability will not be defined by the Site EOE.	C	
120	Shirley Olinger	6	T	Why can't we mitigate the TRU waste container major fire and the oxyacetylene explosion/fire? Is it a dock fire? (470 rem/79 rem)	See response to Comment #15 for flow alarms. We have mitigated both scenarios as much as practical. No change required to document.	C	
121	Shirley Olinger	General	Q	Will be decon plenums that are high before cutting? Where is the control on HEPA filters being removed before cutting.?	Plenums will be decontaminated as much as possible prior to cutting. Fixative will be applied if needed. Adequate controls are identified in the Control Set. No changes required to the document.	C	
122	Shirley Olinger	6	T	Look at add'l controls to further reduce the oxyac plenum accidents to below RC II for CLW. Such things as reducing MAR, no combustibles or storage while cutting	AC 5.6, <i>Fire Protection</i> , identifies control for managing combustibles throughout the 779 Cluster. Specific controls are identified for the cutting of plenums. No additional changes required to analysis or document.	C	
123	Shirley Olinger	6	T	Why shouldn't we credit fire suppression and HEPA filtration for LLW crate fires? This idea of fires not large enough or too big seems like a ploy to eliminate controls.	Dock scenario will be modified to credit fire scenarios	C	
124	Shirley Olinger	6	T	The logic for controls and assumptions in the analysis for the waste crates inside vs outside is an issue. Inside nonlofted with 5 crates that leads to a control to restrict # of crates in one location, Yet, outside it is 2 crates and no restrictions, you can go up to 100 lofted. What is the answer if you use 5	Dock scenario being revised to credit fire suppression. No other changes required to analysis. Controls will be based on dock scenario for storing/staging inside and outside 779 proper.	C	

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			I = Information Q = Question T = Technical			O = Open C = Closed D = Dispositioned	
125	Shirley Olinger	6	T	crates outside nonlofted? There is a statement that the waste crate MAR values will probably be 6 times lower. Is this true when we DD&D. Seems we will want to go up to the limits.	Yes. Statement reflects actual expectations. No change required to document.	C	
126	Shirley Olinger	6	T	How is the fact that we are in noncompliance with HSP 11.03 affect the spill scenarios/	AB support team discussed with reviewer. No impact to spill scenarios. No change required to document.	C	
127	Shirley Olinger	6	T	Where are the controls on fire retardant paint, only allowing 4 size reduction areas, fire watch during hot work, 12 rad issue controls.	AC 5.6, <i>Fire Protection</i> , contains the requirements for control of combustibles (i.e., wood must be coated with fire retardant paint), and fire watches to be established during hot work. Procedures present to RFFO for verification during cross table. Analysis assumption (initial condition) for four size reduction areas will be address via Comment # 63.	C	
128	Shirley Olinger	6	T	What is the criteria to determine which assumptions require controls. The following assumptions implies some type of control is in place to take credit for the assumption: <ul style="list-style-type: none">no more than 4 size reduction areas permitted.multiple room ducting inventories are not evaluated (have fire doors.)	12 rad issue is being resolved separate from the 779 safety analysis. IP process will verify the site wide compensatory measure is in the Emergency Response procedure. DOE Order 5480.22, <i>Technical Safety Requirements</i> and associated DOE Standards were used to select controls.	C	
129	Shirley Olinger	6	T	individual component fires will not propagate to other components or rooms in the facility. (have G/B fire doors?)	Comment #63 addresses RFFO's expectations that all assumptions be identified in the TSR set. AC 5.6, <i>Fire Protection</i> , contains the control to ensure the accident analysis assumption is maintained. No additional controls required in document.	C	

Review Comment Record RFFO Cross Table

Document Number NSTR-002-98		Title 779 Cluster Decommissioning Safety Analysis			Revision 0	Page 29	
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
130	Shirley Olinger	6	T	What is the impact if sealed sources and C0-60 source is not controlled adequately (eg 700 curies dropped)?	Control of Cobalt source will be added to a "specific control" section in one of the ACs as appropriate.	C	
131	Shirley Olinger	6	T	Need to understand bases for following assumption; only 10% of mat'l in a metal waste container is impacted by hydrogen (also show numbers for B371 assumption).	AB support team provided the bases verbally in cross table. No change to document required.	C	
132	Shirley Olinger	6	T	What does the FHA state wrt combustible package inside and outside bldg to ensure that fires don't propagate or involve multiple components.	Current FHA is based on walk-down a year ago. Limitation noted in FHA. New FHA in progress and is not due out until April. 779 Closure project is paying for a separate analysis to assist in the implementing Combustible program mandated by the Control Set.	C	
133	Shirley Olinger	App A	T	Beef-up the Combustible Control/Ignition Source ACR. Use B371 BIO where applicable. Segregate where can store combustibles from size reduction areas and plenum cutting areas. Include fire watch reqmt during oxyac cutting.	AC 5.6, <i>Fire Protection</i> , identifies adequate controls for hot work, fire watch and spacing requirements in size reduction rooms. Will verify that control of ignition sources is properly incorporated by reference.	C	
134	Shirley Olinger	App A	T	Address safety significant equipment in ACR.	See response to HLI 8.	C	
135	Shirley Olinger	App A	T	See Jim's comment on ventilation TSRs. Need a PDT for B779B.	See response to comment #49.	C	
136	Shirley Olinger	App A	T	The Inventory Control ACR needs to be greatly improved to include some of the more significant assumptions in the analysis. For example, removing HEPAs before cutting, 4 size reduction areas, hydrogen venting controls identified in B371 BIO, not allowing 2 days w/o suppression or filtration for TRU (only if on dock and then only filtration, oxyac volume limits, etc.	Accident analysis assumptions will be included in the "specific controls" section of an AC is applicable. See other numerous comments identifying similar concerns and corresponding dispositions.	C	
137	Shirley Olinger	App A	T	Shouldn't we define the alternate means if can't hear the LSDW in TSR since we know we are going to have a problem?	See response to HLI 11.	C	

Review Comment Record RFFO Cross Table

Document Number		Title		Revision		Page 30	
NSTR-002-98		779 Cluster Decommissioning Safety Analysis		0			
No.	Reviewer	Section	Type I = Information Q = Question T = Technical	Comment/Question	Disposition	Status O = Open C = Closed D = Dispositioned	
138	Shirley Olinger	App A	T	How is the fire suppression system effective when you have a radcon ten installed around the G/B, plenum, ducting, etc. For example around the whole G/B unit (e.g., Rm 133) and the effectiveness of the fire suppression system?	Effectiveness of fire suppression system discussed. Control set adequate to control hazards. No change required to document.	C	
139	Shirley Olinger	App A	T	Need in the AC 5.3 controls for the hydrogen venting/purging (see B371 5.2a and f)	AC will identify accident analysis assumption in "specific control" section.	C	
140	Shirley Olinger	App B	Q	Comments 48 through 59 distributed in cross table focused on Appendix B, 779 Cluster Decommissioning Safety Analysis. See Review Comment Record Project file for original set of comments/questions on Appendix B. Those comments documenting which are repetitive are cross referenced to the duplicative comment and disposition on the hard copy. Each comment/question was discussed with the originator to her satisfaction. Agree to changes in the analysis are provided in the disposition.	No detailed response provided. See Review Comment Record (NSTR-dmb-008) for project record. Accident analysis will be revised to reflect the directed controls to provide a more realistic representation of the risk. <ul style="list-style-type: none"> • fire scenarios and spills will be revised to reflect the change in fixatives, • fire suppression will be credited on the dock • fire suppression and filtration will be credited if available throughout the analysis if available, Control Set will contain accident analysis assumptions in the "specific controls" section. Linking will be provided in section 6.7.	C	